Up and Running: Steps to Compliance Monitoring

Louisville, KY

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Steps To Compliance

- Choosing your monitoring systems
- Procuring your system
- CEM program implementation

Choosing Your Monitoring Systems

- Choosing your monitoring systems
  - Evaluating your monitoring requirements
  - Choosing your monitoring methodology
  - Available resources and support
  - Management strategies

Choosing Your Monitoring Systems

- Evaluating your monitoring requirements
  - Knowledge of part 75 requirements
  - Adequacy of present equipment
  - Timeframe for compliance

Choosing Your Monitoring Systems

- Choosing your monitoring methodology
  - Plant configuration
  - Characterization of flue gases
  - Plant experience and preferences

Choosing Your Monitoring Systems

- Available resources and support
  - Capital, operating & maintenance costs
  - Available manpower
  - Vendor support
  - Maintenance contracts

Choosing Your Monitoring Systems

- Management strategies
  - Quality assurance and quality control procedures
  - Maintenance
  - Recordkeeping and reporting
  - In-house technicians vs vendors

Procuring Your Systems

- Many proven systems, manufacturers and vendors are available
- Work within the constraints of your company's procurement process
- Expect CEMS procurement and installation to have an appreciable lead time (6 - 9 months) which may affect your compliance schedule
- Allow time in the compliance schedule for initial certification testing

CEM Program Implementation

- Monitoring Plan
- Certification Testing
- Initial Certification Application
- Recertification
- Quality Assurance and Quality Control
- Recordkeeping and Reporting

Elements of a Monitoring Plan

- Hardcopy {§ 75.53 (e)(2) & (f)}
  - Site locations of the monitoring components (schematics, blueprints, etc.)
  - Data flow diagram (CEMS to DAHS)
  - Strategy and protocol for certification testing
  - MPC, MEC, MER and span calculations
  - Miscellaneous technical justifications

Elements of a Monitoring Plan

- Electronic Portion {§ 75.53 (e)(1) & (f)}
  - Unit information and type
  - Program identifier
  - Monitoring system information
  - Emission formulas
  - Span and range information

Elements of a Monitoring Plan

- Electronic portion {§ 75.53 (e)(1) & (f)}
  - Unit operating load data
  - Fuel flowmeter data (if applicable)
  - Appendix E correlation curves (if applicable)
  - Monitoring methodologies
  - Types of emissions controls
  - Fuel types

Requirements for Monitoring Plan Submittals

- 45 days prior to commencement of initial certification testing
- Within 30 days of an event requiring a monitoring plan change, e.g., equipment, span or range changes
- With each certification or recertification application
- With quarterly report files

Elements of Certification Submittals

- Certification applications
  - Application forms
  - Complete electronic monitoring plan
  - Hardcopy monitoring plan (only if it has changed)
  - Electronic test results
  - Hardcopy test results

Initial Certification Requirements

- Required tests - Part 75, appendix A, section 6:
  - 7-day calibration error test (gas and flow monitors, one-hour each day)
  - Linearity check (gas monitors, 2 hours)
  - Cycle time test (gas monitors, 1 to 2 hours)
  - Relative accuracy test audit (RATA) and bias tests (gas and flow monitors, 2 days)
  - Data acquisition handling system (DAHS) verification

Different Testing Requirements

- Part 75 vs Part 60
  - 3-point linearity check (not a 2-point CGA)
  - RATA specifications (≤ 10.0% RA, not 20%)
  - Cycle time test required
  - Bias tests for NO_x and flow required

Recertification Test Requirements

- Follow the guidelines in EPA's recertification and diagnostic test policy

Timeline for Certification/ Recertification Submittals

- Certification test notification (≥ 45 days prior to the first certification test)
- Certification/recertification application (≤ 45 days after completion of tests)
- Also submit electronic certification and recertification test results in the appropriate quarterly report file

Quality Assurance and Quality Control

- QA/QC Plan contents
  - Preventive maintenance procedures
  - Daily calibration and other QA test procedures
  - Recordkeeping and reporting procedures
  - Maintenance records

Quality Assurance and Quality Control

- Required Tests
  - Daily calibration error tests (all monitors)
  - Daily flow interference checks (flow monitors only)
  - Quarterly linearity checks (gas monitors only)
  - Quarterly flow-to-load checks (flow monitors only)
  - Annual RATA and bias tests (all monitors)

Recordkeeping and Reporting

- Records must be maintained and made available for auditing purposes
- Data acquisition handling system (DAHS)
  - Electronically capture and record hourly data
  - Perform required emissions calculations
  - Perform missing data procedures
  - Generate quarterly report
- Report in EDR version 2.1

CAMD Electronic Addresses

Insert appropriate region number between 1 and 10 following "reg" in email address

- Monitoring Plan

  mp-reg2@epa.gov

  mp-reg3@epa.gov

- Certification/Recertification

  mpcert-reg4@epa.gov

  mpcert-reg5@epa.gov

Coming Attractions!

- MDC - FTP (4th Quarter, 2001)
  - Mandatory for electronic submittal of quarterly reports, monitoring plans, certifications, and recertifications
  - Will not accept files with critical errors

Ask For Help!

- Remember your compliance dates
- Submit the required information to the appropriate agencies
- Include source CEMS contact in RT 999
- Use MDC software to check your electronic monitoring plan and test data before submitting information

OTC Transition

- Guidance document with instructions on transitioning from the OTC NOx Budget Program to the federal NOx Budget Trading Program (associated with the SIP Call and section 126) is now available!